**EarthCam ConstructionCam Lite HD Model # ECCS99271 A&E Specifications**

**01.32.36 Video Monitoring and Documentation**

1. **CAMERA SPECIFICATIONS**
   1. **Contractor Contact Information**

The Contractor shall provide a Robotic High Definition Megapixel Webcam for users to remotely view the project on a secure connection via a network connection. The camera will provide a full view of the work area on the construction site.

CONTACT SYSTEM VENDOR: EarthCam Inc. / Brian Cury +1 201.488.1111

Email: WWW.EARTHCAM.NET/CONTACTUS

* 1. **Camera System for Highest Precision Monitoring and Documentation**
     + 1. Consist of an IP66 weather resistant aluminum housing with an polycarbonate clear dome
       2. Dimensions: 10” (254.6mm) H x 9.93” (252.2mm) W
       3. Industrial grade solid state embedded Linux System
       4. Pan/Tilt/Zoom controls with multiple preset compositions
       5. 32x optical, 12x digital zoom with endless pan angle of 360°
       6. Live video stream in H.264 format
       7. 1920x1080 resolution
       8. H.264, MPEG-4 Part 10/AVC, Motion JPEG video compression
       9. Up to 30fps in all resolutions
       10. Lens: F4.44 – 142.6mm, f/1.6 – 4.41
       11. Auto Features: Focus and Day/Night
       12. Communications: RJ-45 10BASE-T/100BASE-TX PoE
       13. 4G cellular modem
       14. High Power over Ethernet (High PoE), max. 60 W
       15. 120VAC, 220-230VAC or 12VDC power
       16. Designed for EarthCam Control Center Lite

1. **SERVICE SPECIFICATIONS**
   1. **Internet Based Online Interface**

The camera will be accessible via an internet based Software as a Service (SaaS) solution. This online interface will be managed and supported by the System Vendor. The service will be available for the term of the project and allow the viewing of live video and High Definition digital still images captured and stored of the project on both mobile and desktop platforms.

The Internet Based Online Interface shall include the following features:

* + 1. Responsive HTML5 design for cross-platform access on desktop and mobile devices
    2. Secure HTTPS compliant with live stream secured & encrypted via https transport
    3. Display project name and logo
    4. Project Dashboard allows easy navigation between multiple cameras and projects
    5. Security Interface offers flexible multi-view camera grid selective up to 9 cameras per screen streaming simultaneously
    6. Real-time live video viewing
    7. User-controllable Robotic Pan, Tilt and Zoom
    8. User-controllable settings for creating and editing multiple preset compositions, each preset will be displayed as a thumbnail image
    9. Instant live snapshot capability in addition to preset scheduled archives
    10. Visual timeline with quick thumbnail view allows image navigation by year, month, day and hour
    11. Multifunction Image Browsing
    12. Time-lapse feature with optional time date overlay for instant time-lapse viewing, downloading and embedding
    13. Full Screen Mode for displaying video and complete image without any graphical frame
    14. Photo Filters and Graphical Markup Tools for detailing and creating notes with graphical overlays on images, including project title, logo and time date stamp
    15. Image Comparison Tool for comparing two images taken at different times, overlayed on top of each other
    16. Share Image Tool for saving, printing and emailing
    17. Project Management Software integration (Aconex, Autodesk BIM 360, PlanGrid, Procore, SharePoint)
    18. Integration of maps, aerial and satellite imagery
    19. Local weather display
  1. **Security and Management**
     1. Access to account protected by Account Security feature which includes four levels of password protection, IP address block/permission and SSL protection of user login password.
     2. The system shall capture and upload images every 1 hour, 24 hours per day.
     3. The system shall have M2M – Machine to Machine 24/7 Support with active self-healing technology and automatic software upgrades to maintain the quality, consistency and reliability of all images.
     4. Images will be maintained on the System Vendor’s servers for reference available at all times during the life of the project and for no less than 60 days after completion. All images will be protected on servers owned and operated by the System Vendor and located in a secure area at the System Vendor’s location.

1. **CONTRACTOR REQUIREMENTS** 
   1. **Jobsite Requirements**

The Contractor shall secure a nearby structure for camera mounting or provide a fixed pole (40 foot / 12 meters height recommended) and 3 inch / 8 centimeters minimum diameter as per System Vendor’s instruction. The Contractor shall supply all equipment required for safe and secure access to the camera location for technicians performing installation and maintenance services, including building access, bucket truck and/or lift. The System Vendor will consult on and provide recommendations for optimal camera placement and provide professional installation services as required.

* 1. **Camera Maintenance**

The Contractor shall provide all service and maintenance, including cleaning, of the camera system throughout the life of the project including making appropriate arrangements for camera to remain in operation up to and through finalization of all structural, landscaping and “completed state” condition necessary for beginning-to-end record.

1. **DELIVERABLES** 
   1. **Public Website**

The System Vendor shall provide custom public website development. Website shall be separate from the Online Interface, match the look and colors of the project’s website, and be delivered as embed code or standalone web page. Additional features include Facebook and Twitter integration, full screen mode, image comparison, weather, multiple logos, graphical background image and project description.

* 1. **End of Project**

The System Vendor at the end of the project shall provide a comprehensive archive package that includes all images, historical weather data, computer-generated time-lapse movies and a royalty-free web-based viewer software. The software shall include the same interactive interface as the live camera during the project.